Index

to Authors, key words in titles, and to new taxa and stratigraphical terms in Volume 132; (R) indicates Review

Aegean Sea, 637
Aeromagnetic survey, 515, 599
Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M. & Tüysüz, O. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Albrecht, L. & Andréasson, P.-G. Derivation of 500 Ma eclogites from the passive margin of Baltica and a note on the tectonometramorphic heterogeneity of eclogite-bearing crust, 729
Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E. & Ersoy, Ş. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Allen, M., Pow, S., Ryan, P. D. & Stillman, C. J. Terrane geochemistry contrasts across the Iapetus Suture in Ireland, 581
Analytical Sedimentology (R), 123
Ancient DNA. Recovery and Analysis of Genetic Material from Paleontological, Archeological, Museum, Medical and Forensic Specimens (R), 236
Andréasson, P.-G. & Albrecht, L. Derivation of 500 Ma eclogites from the passive margin of Baltica and a note on the tectonometamorphic heterogeneity of eclogite-bearing crust, 729
Angiosperm (R), 235
Anisotropy, magnetic (R), 454
Ankylosaurid, 683
Anorthosites (R), 245
Antarctica, 51, 151, 399
Antrim–Galway Line, 171
Ar, 139, 375, 387
Arabia (R), 755
Arctic (R), 747
Arenig, 693
Astronomy (R), 124
Avalonia, 65, 81
Axis, for GCSE and Standard Grade Geography (R), 746
Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O. & Güneysu, C. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637

Balearic Islands, 435
Baltica, 729
Bangladesh (R), 754
Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E. & Oktay, F. Y. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Barnes, R. P., Merriman, R. J., Floyd, J. D. & Phillips, E. R. The tectonic significance of Ordovician basic igneous rocks in the Southern Uplands, southwest Scotland, 549
Barnes, R. P., Phillips, E. R. & Boland, M. P. The Orlock Bridge Fault in the Southern Uplands of southwestern Scotland: a terrane boundary?, 523
Barrett, P. M. & Upchurch, P. *Regnosaurus northamptoni*, a stegosaurian dinosaur from the Lower Cretaceous of southern England, 213
Beamish, D. Deep resistivity imaging across the Northern and Central belts of the Southern Uplands, 531
Bell, C. M. & Padian, K. Pterosaur fossils from the Cretaceous of Chile: evidence for a pterosaur colony on an inland desert plain, 31
Benthic Foraminiferal Biostratigraphy of the South Caribbean Region (R), 627
Berglund, K., Reginiussen, H. & Krogh Ravna, E. J. Mafic dykes from Øksfjord, Seiland Igneous Province, northern Norway: geochemistry and palaeotectonic significance, 667
Bevins, R. E., Pharaoh, T. C., Cope, J. C. W. & Brewer, T. S. Geochemical character of Neoproterozoic volcanic rocks in southwest Wales, 339
Biodiversity (R), 124
Biology and Palaeobiology of Bryozoans (R), 632
Biozonation, 651
Bitumens in Ore Deposits (R), 131
Bivalve, 117; (R) 132
Björklund, L., Witt-Nilsson, P., Johansson, Å. & Gee, D. G. Isotope studies of granitoids from the Bangenhuk Formation, Ny Friesland Caledonides, Svalbard, 303
Bohemian Massif (R), 752
Boland, M. P., Barnes, R. P. & Phillips, E. R. The Orlock Bridge Fault in the Southern Uplands of southwestern Scotland: a terrane boundary?, 523
Bolivia, 449
Bottrell, S. H., Cliff, R. A., Rex, D. C. & Haggerty, R. Constraints on the age and genesis of the Llanrwst and Llanfair–Talhaiarn orefields, North Wales from K–Ar and Rb–Sr studies, 387
Bouchardon, J.-L., Ouali, H., Piboule, M., Capiez, P. & Briand, B. Geochemistry of bimodal amphibolitic–felsic gneiss complexes from eastern Massif Central, France, 321
Bozkurt, E., Winchester, J. A. & Park, R. G. Geochemistry and tectonic significance of augen gneisses from the southern Menderes Massif (west Turkey), 287
Brachiopods (R), 456
Bragança Massif, 39
Brewer, T. S., Bevins, R. E., Pharaoh, T. C. & Cope, J. C. W. Geochemical character of Neoproterozoic volcanic rocks in southwest Wales, 339
Briand, B., Bouchardon, J.-L., Ouali, H., Piboule, M. & Capiez, P. Geochemistry of bimodal amphibolitic–felsic gneiss complexes from eastern Massif Central, France, 321
Bridges, J. C., Prichard, H. M. & Meireles, C. A. Podiform chromitite-bearing ultrabasic rocks from the Bragança Massif, northern Portugal: fragments of island arc mantle?, 39
Bryozoan (R), 632
Buffetaut, E. An ankylosaurid dinosaur from the Upper Cretaceous of Shandong (China), 683
Buffetaut, E., Martin, V., Sattayarak, N. & Sutteethorn, V.

The oldest known dinosaur from southeast Asia: a prosauropod from the Nam Phong Formation (late Triassic) of northeastern Thailand, 739

C (R), 362
Caledonian deformation, 91
Caledonides, 171, 303, 461, 465, 473, 485, 503, 515, 523, 531, 539, 549, 557, 571, 581, 599, 611, 729
Cambrian, 367, 375, 619, 622, 729; (R) 457
Cambrian–Ordovician lingulate brachiopods from Scandinavia, Kazakhstan, and South Ural Mountains (R), 457
Canada, 81
Canary Islands (R), 240
Capiez, P., Briand, B., Bouchardon, J.-L., Ouali, H. & Piboule, M. Geochemistry of bimodal amphibolitic–felsic gneiss complexes from eastern Massif Central, France, 321
Caradoc, 611
Carbon Cycling in the Global Ocean: Constraints on the Ocean's Role in Global Change. Quantitative Approaches in Paleoceanography (R), 362
Carbonate minerals (R), 242
Carbonatite, 121
Carboniferous, 713; (R) 247
Caribbean (R), 626, 627
Caribbean Geology (R), 626
Carpathians (R), 752
Carson, C. J., Dirks, P. G. H. M., Hand, M., Sims, J. P. & Wilson, C. J. L. Compressional and extensional tectonics in low–medium pressure granulites from the Larsemann Hills, East Antarctica, 151
Chalokwu, C. I. & Seney, P. J. Open-system magma chamber process in the Freetown Complex of Sierra Leone: evidence from Zone 3, 261
Charnockite, 253
Chile, 31
China, 683; (R) 132
Chitinozoa, 651
Chromitite, 39
Clarke Head, 81
Clay Mineralogy: Spectroscopic and Chemical Determinative Methods (R), 250
Clew Bay, 485
Cliff, R. A., Rex, D. C., Haggerty, R. & Bottrell, S. H. Constraints on the age and genesis of the Llanrwst and Llanfair–Talhaiarn orefields, North Wales from K–Ar and Rb–Sr studies, 387
Climate (R), 239
Coal (R), 128, 242, 243, 247
Coal and Coal-Bearing Strata as Oil-Prone Source Rocks? (R), 128
The Coal Measures Forests (R), 247
Coal Supply Prospects in North America (R), 243
Composition, Structure, and Properties of Mineral Matter. Concepts, Results and Problems (R), 244
Conodont, 693
Continental Deformation (R), 130
Cooksonia, 449
Cooper, A. H., Rushton, A. W. A., Molyneux, S. G., Hughes, R. A., Moore, R. M. & Webb, B. C. The stratigraphy, correlation, provenance and palaeogeography of the Skiddaw Group (Ordovician) in the English Lake District, 185
Cope, J. C. W., Brewer, T. S., Bevins, R. E. & Pharaoh, T. C. Geochemical character of Neoproterozoic volcanic rocks in southwest Wales, 339
Correlation, stratigraphical, 15, 185; tectonostratigraphic, 515
Cretaceous, 31, 213, 399, 683
Crustal Structure of the Bohemian Massif and the West Carpathians (R), 752
Crystal Identification with the Polarizing Microscope (R), 625
Crystallization, 1, 261
Crystallography (R), 363, 625, 749
Crystallography. An Introduction (R), 363
Cyanobacteria (R), 744

Dalradian Supergroup, 473
Dean, W. T. & Young, T. P. Discussion on Cambrian stratigraphy of St Tudwal's Peninsula, Gwynedd, northwest Wales: Reply, 622
Deformation, Caledonian, 91; continental (R), 130
Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N. & Ecevitoğlu, B. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Desert, 31
Devon, 713
Devonian, 503
Diagenesis, 375
Diamond (R), 128
Dinosaur Eggs and Babies (R), 126
Dinosaur, 213, 683, 739; (R) 126, 130
Dirks, P. G. H. M., Hand, M., Sims, J. P., Wilson, C. J. L. & Carson, C. J. Compressional and extensional tectonics in low–medium pressure granulites from the Larsemann Hills, East Antarctica, 151
DNA (R), 236
Dobson, D. P., Genge, M. & Jones, A. P. Comment on physical properties of carbonatite magmas inferred from molten salt data, and application to extraction patterns from carbonatite–silicate magma chambers, 121
Dufka, P., Sutherland, S., Grootel, G. van, Verniers, J., Nestor, V. & Paris, F. A global Chitinozoa biozonation for the Silurian, 651
Duller, P. R. & Floyd, J. D. Turbidite geochemistry and provenance studies in the Southern Uplands of Scotland, 557
Dyke, mafic, 667

The Earth. An Introduction to Physical Geology, 4th ed. (R), 239
Earth history (R), 237, 241, 357
Earthquake (R), 747, 755
Eastern Europe (R), 751, 752
Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A. & Sarıca, N. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Eclogite, 729
Edwards, D., Iñigez Rodriguez, M. & Morel, E. The first record of *Cooksonia* from South America in Silurian rocks of Bolivia, 449
Egypt (R), 755
Electric field (R), 244
Energy, geothermal (R), 752
England, 15, 65, 117, 185, 213, 223

England, R. W. & McBride, J. H. Problems interpreting deep crustal reflectors beneath the Moine Thrust between Shetland and the Scottish Highlands, 465
England, R. W., Hutton, D. H. W., Ryan, P. D., Soper, N. J. & Snyder, D. B. The Antrim–Galway Line: a resolution of the Highland Border Fault enigma of the Caledonides of Britain and Ireland, 171
The Enigma of Angiosperm Origins (R), 235
Environment (R), 235, 239, 746
Environment and People. An Integrated Course for A and AS Geography (R), 746
Environmental Evolution. Effects of the Origin and Evolution of Life on Planet Earth (R), 131
Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B. & Demirbağ, E., Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Eukaryote (R), 748
European Coal Prospects to 2010 (R), 243
Evans, J. A. & Stone, P. Nd-isotope study of provenance patterns across the British sector of the Iapetus Suture, 571
Evolution and Extinction (R), 755
Evolution, biological (R), 129, 628, 755; environmental (R), 131; tectonic, 503, 549, 667
Extinction (R), 755

Facies analysis (R), 743
Fallick, A. E., Oliver, G. J. H. & Johnson, M. R. W. Age of metamorphism in the Lesser Himalaya and the Main Central Thrust Zone, Garhwal India: results of illite crystallinity, ^{40}Ar–^{39}Ar fusion and K–Ar studies, 139
Fantasy of Flow. The World of Fluid Flow Captured in Photographs (R), 456
Fault breccia, 81
Fault system (R), 132
Faulting, Friction and Earthquake Mechanics. Parts I and II (R), 747
Faunal gradient, 611
Feldspar (R), 245
Fenland, 223
Fernandez-Diaz, L., Putnis, A. & Prieto, M. Fluid supersaturation and crystallization in porous media, 1
Field guide (R), 127, 240, 363
Fielding, C. R. & Webb, J. A. Sedimentology of the Permian Radok Conglomerate in the Beaver Lake area of MacRobertson Land, East Antarctica, 51
Flow, fluid (R), 456
Floyd, J. D. & Duller, P. R. Turbidite geochemistry and provenance studies in the Southern Uplands of Scotland, 557
Floyd, J. D. & Kimbell, G. S. Magnetic and tectonostratigraphic correlation at a terrane boundary: the Tappins Group of the Southern Uplands, 515
Floyd, J. D., Phillips, E. R., Barnes, R. P. & Merriman, R. J. The tectonic significance of Ordovician basic igneous rocks in the Southern Uplands, southwest Scotland, 549
Floyd, J. D., Styles, M. T. & Perez-Alvarez, M. Pyroxenous greywackes in the Southern Uplands of Scotland and their petrotectonic implications, 539
Fluids, 1; (R) 453, 456, 457, 631; geothermal (R), 125
Fluids in the Crust. Equilibrium and Transport Properties (R), 453
Fluxes (R), 743
Foraminifera (R), 627
Formation and Deformation of Glacial Deposits (R), 248
Fortey, R. A., Harper, D. A. T., Ingham, J. K., Owen, A. W. & Rushton, A. W. A. A revision of Ordovician series and stages from the historical type area, 15
Die Fossilien von Solnhofen. Dokumentation der aus den Platte kalken bekannten Tiere und Pflanzen. The Fossils of Solnhofen. Documenting the Animals and Plants from the Plattenkalks (R), 629
Fossil Reptiles of Great Britain (R), 756
France, 321
Friction (R), 747
Fuel Peat – World Resources and Utilisation (R), 243

Galapagos Marine Invertebrates. Taxonomy, Biogeography, and Evolution in Darwin's Islands (R), 129
Gee, D. G., Björklund, L., Witt-Nilsson, P. & Johansson, Å. Isotope studies of granitoids from the Bangenhuk Formation, Ny Friesland Caledonides, Svalbard, 303
Gemmology (R), 128, 362
Genetic material (R), 236
Genge, M., Jones, A. P. & Dobson, D. P. Comment on physical properties of carbonatite magmas inferred from molten salt data, and application to extraction patterns from carbonatite–silicate magma chambers, 121
Geochemical Thermodynamics, 2nd ed. (R), 246
Geochemistry, 287, 321, 339, 413, 557, 581, 667; (R) 124, 246, 626, 743
Geochemistry, Groundwater and Pollution (R), 124
Geochronology, 139, 253, 375, 387
Geofluids: Origin, Migration and Evolution of Fluids in Sedimentary Basins (R), 457
Geography (R), 746
Geology and Environment in Britain and Ireland (R), 235
Geology of Bangladesh (R), 754
Geology, general (R), 239, 241; mathematical (R), 133
Geomagnetism (R), 625
Geophysical Field Theory and Method, Part A. Gravitational, Electric, and Magnetic Fields (R), 244
Geothermal Energy in Europe. The Soultz Hot Dry Rock Project (R), 752
Geothermal Fluids. Chemistry and Exploration Techniques (R), 125
The GIA Diamond Dictionary, 3rd ed. (R), 128
Gibbons, W. & Murphy, J. B. Mylonitic mafic granulite in fault megabreccia at Clarke Head, Nova Scotia: a sample of Avalonian lower crust?, 81
Glacial deposits (R), 248, 249, 750
Glacial Environments (R), 750
Global Biodiversity. Status of the Earth's Living Resources. A Report Compiled by the World Conservation Monitoring Centre (R), 124
Global Environmental Issues: A Climatological Approach (R), 239
Gneiss, 287, 321
Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C. & Aykol, A. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Granite, 413; (R) 245
Granitoids, 303
Granulite, 151
Graptolite, 113, 427, 611
Gravity Field and Dynamics of the Earth (R), 455

Gravity field (R), 244, 455
Grootel, G. van, Verniers, J., Nestor, V., Paris, F., Dufka, P. & Sutherland, S. A global Chitinozoa biozonation for the Silurian, 651
Groundwater (R), 124
Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş. & Algan, O. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637

Haggerty, R., Bottrell, S. H., Cliff, R. A. & Rex, D. C. Constraints on the age and genesis of the Llanrwst and Llanfair–Talhaiarn orefields, North Wales from K–Ar and Rb–Sr studies, 387
Halicz, L., Steinitz, G., Lang, B. & Segev, A. Post-depositional processes on a buried Cambrian sequence in southern Israel, north Arabian Massif: evidence from new K–Ar dating of Mn-nodules, 375
Hamdi, B., Rozanov, A. Yu. & Zhuravlev, A. Yu. Latest Middle Cambrian metazoan reef from northern Iran, 367
Hand, M., Sims, J. P., Wilson, C. J. L., Carson, C. J. & Dirks, P. G. H. M. Compressional and extensional tectonics in low–medium pressure granulites from the Larsemann Hills, East Antarctica, 151
Harland, W. B. Discussion on the Ny Friesland Orogen, Spitsbergen: Reply, 354
Harper, D. A. T., Ingham, J. K., Owen, A. W., Rushton, A. W. A. & Fortey, R. A. A revision of Ordovician series and stages from the historical type area, 15
The Hidden Landscape. A Journey into the Geological Past (R), 237
Highland Border Complex, 473
Highland Border Fault, 171
Himalaya, 139
A History of the Earth (R), 241
Holocene, 223
Hughes, R. A. The durations of Silurian graptolite zones, 113
Hughes, R. A., Moore, R. M., Webb, B. C., Cooper, A. H., Rushton, A. W. A. & Molyneux, S. G. The stratigraphy, correlation, provenance and palaeogeography of the Skiddaw Group (Ordovician) in the English Lake District, 185
Hutton, D. H. W., Ryan, P. D., Soper, N. J., Snyder, D. B. & England, R. W. The Antrim–Galway Line: a resolution of the Highland Border Fault enigma of the Caledonides of Britain and Ireland, 171
Hydrocarbons of Eastern Central Europe. Habitat, Exploration and Production History (R), 751

Iapetus Ocean, 611
Iapetus Suture, 571, 581, 599, 611
Ichnofauna, 267
Igneous rocks, 261, 287, 321, 399, 413, 549, 667; (R), 245
Illite, 139
India, 139, 253
Infrared Transmission Spectra of Carbonate Minerals (R), 242
Ingham, J. K., Owen, A. W., Rushton, A. W. A., Fortey, R. A. & Harper, D. A. T. A revision of Ordovician series and stages from the historical type area, 15
Iñigez Rodriguez, M., Morel, E. & Edwards, D. The first record of *Cooksonia* from South America in Silurian rocks of Bolivia, 449
In Marble Halls. Geology in Trinity College, Dublin (R), 240
An Introduction to Global Environmental Issues (R), 239
Introduction to Linear Algebra in Geology (R), 133
Invasions of the Land. The Transitions of Organisms from Aquatic to Terrestrial Life (R), 628
Invertebrates (R), 129
Iran, 367
Ireland, 91, 171, 485, 581
Island arc, 39
Isotope studies, 303
Isotope: Ar, 139, 375, 387; C (R), 362; K, 139, 375, 387; Nd, 253, 571; Rb, 253, 303, 387; Sm, 253; Sr, 253, 303, 387
Israel, 375

Johansson, Å., Gee, D. G., Björklund, L. & Witt-Nilsson, P. Isotope studies of granitoids from the Bangenhuk Formation, Ny Friesland Caledonides, Svalbard, 303
Johnson, M. R. W., Fallick, A. E. & Oliver, G. J. H. Age of metamorphism in the Lesser Himalaya and the Main Central Thrust Zone, Garhwal India: results of illite crystallinity, ^{40}Ar–^{39}Ar fusion and K–Ar studies, 139
Johnston, J. D. & Phillips, W. E. A. Terrane amalgamation in the Clew Bay region, west of Ireland, 485
Johnston, J. D. Major northwest-directed Caledonian thrusting and folding in Precambrian rocks, northwest Mayo, Ireland, 91
Jones, A. P., Dobson, D. P. & Genge, M. Comment on physical properties of carbonatite magmas inferred from molten salt data, and application to extraction patterns from carbonatite–silicate magma chambers, 121
Jurassic, 117

K, 139, 375, 387
The Key to Earth History. An Introduction to Stratigraphy (R), 237
Kimbell, G. S. & Floyd, J. D. Magnetic and tectono-stratigraphic correlation at a terrane boundary: the Tappins Group of the Southern Uplands, 515
Kimbell, G. S. & Stone, P. Caledonian terrane relationships in Britain: an introduction, 461
Kimbell, G. S. & Stone, P. Crustal magnetization variations across the Iapetus Suture Zone, 599
Krogh Ravna, E. J., Berglund, K. & Reginiussen, H. Mafic dykes from Øksfjord, Seiland Igneous Province, northern Norway: geochemistry and palaeotectonic significance, 667

Lagerstätten (R), 247, 629
Lake District, 185; (R) 363
Lakeland Rocky Rambles. Geology Beneath Your Feet (R), 363
Lang, B., Segev, A., Halicz, L. & Steinitz, G. Post-depositional processes on a buried Cambrian sequence in southern Israel, north Arabian Massif: evidence from new K–Ar dating of Mn-nodules, 375
Lanna Stage, 693
Lava (R), 626
Leat, P. T., Scarrow, J. H. & Millar, I. L. On the Antarctic Peninsula batholith, 399
Leny Limestone, 473
Llandovery, 267
Löfgren, A. The middle Lanna/Volkhov Stage (middle Arenig) of Sweden and its conodont fauna, 693
Lundy Island, 413

Lyberis, N. & Manby, G. M. Discussion on the Ny Friesland Orogen, Spitsbergen: Comment, 351

Magma chamber process, 261
The Magnetic Anisotropy of Rocks (R), 454
Magnetic anomaly, 515, 599
Magnetic field (R), 244, 454
Magnetotelluric survey, 531, 599
Mallorca, 435
Manby, G. M. & Lyberis, N. Discussion on the Ny Friesland Orogen, Spitsbergen: Comment, 351
Manganese nodule, 375
Marine Palaeoenvironmental Analysis from Fossils (R), 454
Marine Permian of England (R), 455
Martin, V., Sattayarak, N., Sutteethorn, V. & Buffetaut, E. The oldest known dinosaur from southeast Asia: a prosauropod from the Nam Phong Formation (late Triassic) of northeastern Thailand, 739
Massif Central, 321
Material Fluxes on the Surface of the Earth (R), 743
Mathematical geology (R), 133, 453
Mathematics: A Simple Tool for Geologists (R), 453
Mats, microbial (R), 744
McBride, J. H. & England, R. W. Problems interpreting deep crustal reflectors beneath the Moine Thrust between Shetland and the Scottish Highlands, 465
Mediterranean, 435
Meireles, C. A., Bridges, J. C. & Prichard, H. M. Podiform chromitite-bearing ultrabasic rocks from the Bragança Massif, northern Portugal: fragments of island arc mantle?, 39
Melting and Melt Movement in the Earth (R), 631
Merriman, R. J., Floyd, J. D., Phillips, E. R. & Barnes, R. P. The tectonic significance of Ordovician basic igneous rocks in the Southern Uplands, southwest Scotland, 549
Metamorphic rocks, 287, 321, 729
Metamorphism, 139, 253
Metazoa, 367
Microbial Mats. Structure, Development and Environmental Significance (R), 744
Microfossils (R), 360
Microscopy (R), 625
Midland Valley, 503
The Mid-Oceanic Ridges. Mountains Below Sea Level (R), 456
Millar, I. L., Leat, P. T. & Scarrow, J. H. On the Antarctic Peninsula batholith, 399
Mineralogy (R), 244, 362; clay (R), 250
A Mineralogy of Wales (R), 244
Minerals & Gemstones of the World (R), 362
Miocene, 637
Moine Thrust, 465
Molyneux, S. G., Hughes, R. A., Moore, R. M., Webb, B. C., Cooper, A. H. & Rushton, A. W. A. The stratigraphy, correlation, provenance and palaeogeography of the Skiddaw Group (Ordovician) in the English Lake District, 185
Monitoring Active Volcanoes. Strategies, Procedures and Techniques (R), 746
Moore, R. M., Webb, B. C., Cooper, A. H., Rushton, A. W. A., Molyneux, S. G. & Hughes, R. A. The stratigraphy, correlation, provenance and palaeogeography of the Skiddaw Group (Ordovician) in the English Lake District, 185
Morel, E., Edwards, D. & Iñigez Rodriguez, M. The first record of *Cooksonia* from South America in Silurian rocks of Bolivia, 449
Murphy, J. B. & Gibbons, W. Mylonitic mafic granulite in fault megabreccia at Clarke Head, Nova Scotia: a sample of Avalonian lower crust?, 81

A Naturalist's Guide to the Arctic (R), 747
The Nature and Origin of Granite (R), 245
Nd, 253, 571
Nestor, V., Paris, F., Dufka, P., Sutherland, S., Grootel, G. van & Verniers, J. A global Chitinozoa biozonation for the Silurian, 651
New Views on an Old Planet. A History of Global Change, 2nd ed. (R), 357
Nodule, Mn, 375
North Sea Oil & Gas Reservoirs III (R), 359
Norway, 667
Nova Scotia, 81
Nucleation, 1
Ny Friesland, 303, 351, 354

Observation of the Earth and Its Environment. Survey of Missions and Sensors, 2nd ed. (R), 246
Oil (R), 128
Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R. & Yigitbaş, E. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Oliver, G. J. H., Johnson, M. R. W. & Fallick, A. E. Age of metamorphism in the Lesser Himalaya and the Main Central Thrust Zone, Garhwal India: results of illite crystallinity, ^{40}Ar–^{39}Ar fusion and K–Ar studies, 139
Ordovician, 15, 65, 185, 549, 611, 693, 729; (R) 456
Ore deposit, 39; (R) 131
Ore Elements in Arc Lavas (R), 626
Orefield, 387
Organic Compounds from Coal Utilisation (R), 242
Organic Sulphur in Coal (R), 242
Orlock Bridge Fault, 523
Orr, P. J. A deep-marine ichnofaunal assemblage from Llandovery strata of the Welsh Basin, west Wales, UK, 267
Ouali, H., Piboule, M., Capiez, P., Briand, B. & Bouchardon, J.-L. Geochemistry of bimodal amphibolitic–felsic gneiss complexes from eastern Massif Central, France, 321
Owen, A. W., Rushton, A. W. A., Fortey, R. A., Harper, D. A. T. & Ingham, J. K. A revision of Ordovician series and stages from the historical type area, 15
Owen, A. W., Zalasiewicz, J. A. & Rushton, A. W. A. Late Caradoc graptolitic faunal gradients across the Iapetus Ocean, 611
Owens, R. M. & Tilsley, J. W. An atheloptic trilobite assemblage from the Carboniferous of North Devon, 713

Padian, K. & Bell, C. M. Pterosaur fossils from the Cretaceous of Chile: evidence for a pterosaur colony on an inland desert plain, 31
Palaeobiology (R), 126, 360, 632, 748
The Palaeobiology of Trace Fossils (R), 126
Palaeoceanography (R), 362
Palaeoecology (R), 454
Palaeoenvironment (R), 454
Palaeogeography, 185; (R) 237

Palaeomagnetism, 65; (R) 454
Paleobiology of the Neoproterozoic Svanbergfjellet Formation, Spitsbergen (R), 360
Palynology (R), 235
Pan-African event, 253
Paris, F., Dufka, P., Sutherland, S., Grootel, G. van, Verniers, J. & Nestor, V. A global Chitinozoa biozonation for the Silurian, 651
Park, R. G., Bozkurt, E. & Winchester, J. A. Geochemistry and tectonic significance of augen gneisses from the southern Menderes Massif (west Turkey), 287
Peat (R), 243
Perez-Alvarez, M., Floyd, J. D. & Styles, M. T. Pyroxenous greywackes in the Southern Uplands of Scotland and their petrotectonic implications, 539
The Periglaciation of Great Britain (R), 249
Permanent Satellite Tracking Networks for Geodesy and Geodynamics (R), 630
Permian, 51, 435; (R) 455
Petroleum geology (R), 128, 359, 361, 751, 753
Pharaoh, T. C., Cope, J. C. W., Brewer, T. S. & Bevins, R. E. Geochemical character of Neoproterozoic volcanic rocks in southwest Wales, 339
Phillips, E. R., Barnes, R. P., Merriman, R. J. & Floyd, J. D. The tectonic significance of Ordovician basic igenous rocks in the Southern Uplands, southwest Scotland, 549
Phillips, E. R., Boland, M. P. & Barnes, R. P. The Orlock Bridge Fault in the Southern Uplands of southwestern Scotland: a terrane boundary?, 523
Phillips, W. E. A. & Johnston, J. D. Terrane amalgamation in the Clew Bay region, west of Ireland, 485
Phosphatization, 117
Piboule, M., Capiez, P., Briand, B., Bouchardon, J.-L. & Ouali, H. Geochemistry of bimodal amphibolitic–felsic gneiss complexes from eastern Massif Central, France, 321
Piper, J. D. A. Palaeomagnetism of Late Ordovician igneous intrusions from the northern Welsh Borderlands: implications to motion of Eastern Avalonia and regional rotations, 65
Plant fossils, 449
Pollen (R), 235
Porous media, 1
Portugal, 39
Pow, S., Ryan, P. D., Stillman, C. J. & Allen, M. Terrane geochemistry contrasts across the Iapetus Suture in Ireland, 581
Practical Sedimentology, 2nd ed. (R), 123
Pratt, W. T. Discussion on Cambrian stratigraphy of St Tudwal's Peninsula, Gwynedd, northwest Wales: Comment, 619
Precambrian, 91; (R) 455
Prehistoric Life. The Rise of the Vertebrates (R), 357
Prichard, H. M., Meireles, C. A. & Bridges, J. C. Podiform chromitite-bearing ultrabasic rocks from the Bragança Massif, northern Portugal: fragments of island arc mantle?, 39
Prieto, M., Fernandez-Diaz, L. & Putnis, A. Fluid supersaturation and crystallization in porous media, 1
Principles of Petroleum Reservoir Engineering, Volumes 1 and 2 (R), 753
Prosauropod, 739
Provenance study, 185, 539, 557, 571
Pterosaur, 31
Putnis, A., Prieto, M. & Fernandez-Diaz, L. Fluid supersaturation and crystallization in porous media, 1
Pyroxene, detrital, 539

Radioelements, 413
Radok Conglomerate, 51
Ramos, A. Transition from alluvial to coastal deposits (Permian–Triassic) on the Island of Mallorca, western Mediterranean, 435
Rb, 253, 303, 387
Red Sea (R), 755
Reef, 367
Reginiussen, H., Krogh Ravna, E. J. & Berglund, K. Mafic dykes from Øksfjord, Seiland Igneous Province, northern Norway: geochemistry and palaeotectonic significance, 667
Remote Sensing and Image Interpretation, 3rd ed. (R), 248
Remote Sensing Digital Image Analysis. An Introduction, 2nd ed. (R), 453
Remote Sensing for Geologists. A Guide to Image Interpretation (R), 630
Remote sensing (R), 246, 248, 453, 630
Reptile (R), 756
Reservoir engineering (R), 753
Resistivity imaging, 531
Reversals of the Earth's Magnetic Field, 2nd ed. (R), 625
A Revised Correlation of Precambrian Rocks in the British Isles (R), 455
Rex, D. C., Haggerty, R., Bottrell, S. H. & Cliff, R. A. Constraints on the age and genesis of the Llanrwst and Llanfair–Talhaiarn orefields, North Wales from K–Ar and Rb–Sr studies, 387
Rift, 637
Rigby, S. & Sudbury, M. Graptolite ontogeny and the size of the graptolite zooid, 427
Rozanov, A. Yu., Zhuravlev, A. Yu. & Hamdi, B. Latest Middle Cambrian metazoan reef from northern Iran, 367
Rushton, A. W. A., Fortey, R. A., Harper, D. A. T., Ingham, J. K. & Owen, A. W. A revision of Ordovician series and stages from the historical type area, 15
Rushton, A. W. A., Molyneux, S. G., Hughes, R. A., Moore, R. M., Webb, B. C. & Cooper, A. H. The stratigraphy, correlation, provenance and palaeogeography of the Skiddaw Group (Ordovician) in the English Lake District, 185
Rushton, A. W. A., Owen, A. W. & Zalasiewicz, J. A. Late Caradoc graptolitic faunal gradients across the Iapetus Ocean, 611
Ryan, P. D., Soper, N. J., Snyder, D. B., England, R. W. & Hutton, D. H. W. The Antrim–Galway Line: a resolution of the Highland Border Fault enigma of the Caledonides of Britain and Ireland, 171
Ryan, P. D., Stillman, C. J., Allen, M. & Pow, S. Terrane geochemistry contrasts across the Iapetus Suture in Ireland, 581

Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N. & Şengör, A. M. C. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Santosh, M., Yoshida, M. & Unnikrishnan-Warrier, C. First report of Pan-African Sm–Nd and Rb–Sr mineral isochron ages from regional charnockites of southern India, 253
Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C.,

Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y. & Barka, A. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Sattayarak, N., Sutteethorn, V., Buffetaut, E. & Martin, V. The oldest known dinosaur from southeast Asia: a prosauropod from the Nam Phong Formation (late Triassic) of northeastern Thailand, 739
Scarrow, J. H., Millar, I. L. & Leat, P. T. On the Antarctic Peninsula batholith, 399
Scotland, 465, 473, 503, 515, 523, 539, 549, 557
Sedimentary Facies Analysis. A Tribute to the Research and Teaching of Harold G. Reading (R), 743
Sedimentation as a Three-Component System. Organic Carbon, Carbonate, Noncarbonate (R), 358
Sedimentology, 51, 435; (R) 123, 358, 743
Segev, A., Halicz, L., Steinitz, G. & Lang, B. Post-depositional processes on a buried Cambrian sequence in southern Israel, north Arabian Massif: evidence from new K–Ar dating of Mn-nodules, 375
Seismic reflection, 465
Seismicity (R), 748, 755
The Seismicity of Egypt, Arabia and the Red Sea. A Historical Review (R), 755
Seismosaurus. *The Earth Shaker* (R), 130
Seney, P. J. & Chalokwu, C. I. Open-system magma chamber process in the Freetown Complex of Sierra Leone: evidence from Zone 3, 261
Şengör, A. M. C., Sakınç, M., Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A. & Görür, N. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637
Shallow Subduction Zones. Seismicity, Mechanics and Seismic Potential. Part II (R), 748
Shetland, 465
Sierra Leone, 261
Silurian Nuculoid and Modiomorphid Bivalves from Sweden (R), 132
Silurian, 113, 267, 449, 503, 651; (R) 132
Sims, J. P., Wilson, C. J. L., Carson, C. J., Dirks, P. G. H. M. & Hand, M. Compressional and extensional tectonics in low–medium pressure granulites from the Larsemann Hills, East Antarctica, 151
Skiddaw Group, 185
Sm, 253
Smith, R. A. The Siluro-Devonian evolution of the southern Midland Valley of Scotland, 503
Snyder, D. B., England, R. W., Hutton, D. H. W., Ryan, P. D. & Soper, N. J. The Antrim–Galway Line: a resolution of the Highland Border Fault enigma of the Caledonides of Britain and Ireland, 171
Solnhofen (R), 629
Soper, N. J., Snyder, D. B., England, R. W., Hutton, D. H. W. & Ryan, P. D. The Antrim–Galway Line: a resolution of the Highland Border Fault enigma of the Caledonides of Britain and Ireland, 171
Southern Uplands, 515, 523, 531, 539, 549, 557
Soultz HDR Project (R), 752
Spectroscopy (R), 242, 250
Spitsbergen, 351, 354; (R) 360
Sr, 253, 303, 387
St Tudwal's Peninsula, 619, 622
Stegosaur, 213
Steinitz, G., Lang, B., Segev, A. & Halicz, L. Post-depositional processes on a buried Cambrian sequence in southern Israel, north Arabian Massif: evidence from new K–Ar dating of Mn-nodules, 375
Stillman, C. J., Allen, M., Pow, S. & Ryan, P. D. Terrane geochemistry contrasts across the Iapetus Suture in Ireland, 581
Stone, P. & Evans, J. A. Nd-isotope study of provenance patterns across the British sector of the Iapetus Suture, 571
Stone, P. & Kimbell, G. S. Caledonian terrane relationships in Britain: an introduction, 461
Stone, P. & Kimbell, G. S. Crustal magnetization variations across the Iapetus Suture Zone, 599
Stratigraphy, bio-, 113, 619, 622; (R) 627; chrono-, 15, 113; litho-, 223, 619, 622; (R) 237
Stromatolites (R), 744
Structural Geology of Fold and Thrust Belts (R), 238
Structural Traps VIII (R), 361
Structure of Crystals, 2nd ed. (R), 749
Structure, crustal (R), 749, 752
Styles, M. T., Perez-Alvarez, M. & Floyd, J. D. Pyroxenous greywackes in the Southern Uplands of Scotland and their petrotectonic implications, 539
Subduction (R), 748, 749
Subduction. Insights from Physical Modeling (R), 749
Sudbury, M. & Rigby, S. Graptolite ontogeny and the size of the graptolite zooid, 427
Sulphur and Coal (R), 242
Supersaturation, 1
Sutherland, S., Grootel, G. van, Verniers, J., Nestor, V., Paris, F. & Dufka, P. A global Chitinozoa biozonation for the Silurian, 651
Sutteethorn, V., Buffetaut, E., Martin, V. & Sattayarak, N. The oldest known dinosaur from southeast Asia: a prosauropod from the Nam Phong Formation (late Triassic) of northeastern Thailand, 739
Svalbard, 303, 351, 354; (R) 360
Sweden, 693; (R) 132

The Tancheng–Lujiang Wrench Fault System (R), 132
Tanner, P. W. G. New evidence that the Lower Cambrian Leny Limestone at Callander, Perthshire, belongs to the Dalradian Supergroup, and a reassessment of the 'exotic' status of the Highland Border Complex, 473
Tappins Group, 515
Tectonics, 151, 287, 637, 667
Telescope Power. Fantastic Activities and Easy Projects for Young Astronomers (R), 124
Tenerife, Canary Islands (R), 240
Terrane, 461, 473, 485, 515, 523, 571, 581
Tertiary, 413
Thailand, 739
Thermodynamics (R), 246
Thorpe, R. S., Tindle, A. G. & Williams-Thorpe, O. Radioelement distribution in the Tertiary Lundy granite (Bristol Channel, UK), 413
Tilsley, J. W. & Owens, R. M. An atheloptic trilobite assemblage from the Carboniferous of North Devon, 713
Tindle, A. G., Williams-Thorpe, O. & Thorpe, R. S. Radioelement distribution in the Tertiary Lundy granite (Bristol Channel, UK), 413
Trace fossils, 267; (R) 126
Tracing the History of Eukaryotic Cells. The Enigmatic Smile (R), 748
Transport, fluid (R), 453, 457
Triassic, 435, 739

Trilobite, 713
Trinity College, Dublin (R), 240
Turbidite, 557
Turkey, 287, 637
Tüysüz, O., Akkök, R., Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C. & Sakınç, M. Rift formation in the Gökova region, southwest Anatolia: implications for the opening of the Aegean Sea, 637

UK, 171, 267, 413, 461, 713
Ultrabasic rocks, 39
Unnikrishnan-Warrier, C., Santosh, M. & Yoshida, M. First report of Pan-African Sm–Nd and Rb–Sr mineral isochron ages from regional charnockites of southern India, 253
Upchurch, P. & Barrett, P. M. *Regnosaurus northamptoni*, a stegosaurian dinosaur from the Lower Cretaceous of southern England, 213

Verniers, J., Nestor, V., Paris, F., Dufka, P., Sutherland, S. & Grootel, G. van. A global Chitinozoa biozonation for the Silurian, 651
Vertebrate, 31, 213, 683, 739; (R) 126, 130, 357, 756
Volcanic rocks, 339; (R) 359, 456, 626
Volcanism and Early Terrestrial Biotas (R), 247
Volcanism Associated with Extension at Consuming Plate Margins (R), 359
Volcano (R), 240, 241, 746
Volcanoes: An Introduction (R), 241
Volkhov Stage, 693

Wales, 15, 65, 267, 339, 387, 619, 622; (R) 244
Waller, M. P. & Wheeler, A. J. The Holocene lithostratigraphy of Fenland, eastern England: a review and suggestions for redefinition, 223
Webb, B. C., Cooper, A. H., Rushton, A. W. A., Molyneux, S. G., Hughes, R. A. & Moore, R. M. The stratigraphy, correlation, provenance and palaeogeography of the Skiddaw Group (Ordovician) in the English Lake District, 185
Webb, J. A. & Fielding, C. R. Sedimentology of the Permian Radok Conglomerate in the Beaver Lake area of MacRobertson Land, East Antarctica, 51
Welsh Basin, 267
Wheeler, A. J. & Waller, M. P. The Holocene lithostratigraphy of Fenland, eastern England: a review and suggestions for redefinition, 223
Whyte, M. A. & Wilby, P. R. Phosphatized soft tissues in bivalves from the Portland Roach of Dorset (Upper Jurassic), 117
Wilby, P. R. & Whyte, M. A. Phosphatized soft tissues in bivalves from the Portland Roach of Dorset (Upper Jurassic), 117
Williams-Thorpe, O., Thorpe, R. S. & Tindle, A. G. Radioelement distribution in the Tertiary Lundy granite (Bristol Channel, UK), 413
Wilson, C. J. L., Carson, C. J., Dirks, P. G. H. M., Hand, M. & Sims, J. P. Compressional and extensional tectonics in low–medium pressure granulites from the Larsemann Hills, East Antarctica, 151
Winchester, J. A., Park, R. G. & Bozkurt, E. Geochemistry and tectonic significance of augen gneisses from the southern Menderes Massif (west Turkey), 287
Witt-Nilsson, P., Johansson, Å., Gee, D. G. & Björklund, L. Isotope studies of granitoids from the Bangenhuk Formation, Ny Friesland Caledonides, Svalbard, 303

Yigitbaş, E., Oktay, F. Y., Barka, A., Sarıca, N., Ecevitoğlu, B., Demirbağ, E., Ersoy, Ş., Algan, O., Güneysu, C., Aykol, A., Görür, N., Şengör, A. M. C., Sakınç, M., Tüysüz, O. & Akkök, R. Rift formation in the Gökova region, southwest Anatolia: implication for the opening of the Aegean Sea, 637
Yorkshire (R), 127
Yorkshire Rocks and Landscape. A Field Guide (R), 127
Yoshida, M., Unnikrishnan-Warrier, C. & Santosh, M. First report of Pan-African Sm–Nd and Rb–Sr mineral isochron ages from regional charnockites of southern India, 253
Young, T. P. & Dean, W. T. Discussion on Cambrian stratigraphy of St Tudwal's Peninsula, Gwynedd, northwest Wales: Reply, 622

Zalasiewicz, J. A., Rushton, A. W. A. & Owen, A. W. Late Caradoc graptolitic faunal gradients across the Iapetus Ocean, 611
Zhuravlev, A. Yu., Hamdi, B. & Rozanov, A. Yu. Latest Middle Cambrian metazoan reef from northern Iran, 367